

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-17 remain pending in the present application. No claims are amended by the present amendment.

In the outstanding Office Action, Claims 1-17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Rosenberg et al. (U.S. Patent Application Publication No. 2001/035854 A1, hereinafter "Rosenberg") in view of Toki (U.S. Patent No. 5,856,956).

Applicants have deleted the Abstract and have submitted a new Abstract herewith.

Independent Claims 1 and 14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Rosenberg in view of Toki. Applicants respectfully traverse this rejection.

Independent Claim 1 recites, in part, an input device including a vibration generation device,

the vibration generation device being a bimorph piezoelectric actuator including a first actuator unit and a second actuator unit stacked on the first actuator unit in which when one of the first and second actuator units expands, the other contracts, each of the first and second actuator units having multi-layered piezoelectric element layer.

Applicants respectfully submit that Rosenberg and Toki fail to disclose or suggest these features.

Rosenberg concerns a touchpad directly coupled to a grounded piezo-electric actuator.¹ According to Rosenberg, a piezo-electric actuator includes two layers which can move relative to each other when a current is applied to the actuator.² In the Rosenberg

¹ Rosenberg, paragraph [0040].

² Id.

actuator, the grounded portion of the actuator remains stationary while the moving portion of the actuator moves.³

Applicants respectfully submit that Rosenberg is silent with regard to whether the piezo-electric actuator is, for example, a unimorph piezoelectric actuator. Accordingly, it is submitted that Rosenberg fails to disclose or suggest ***a bimorph piezoelectric actuator including a first actuator unit and a second actuator unit, wherein each of the first and second actuator units having a multi-layered piezoelectric element layer***, as recited in independent Claim 1. The Office Action concedes, at page 2, lines 23-25, that Rosenberg does not teach this feature.

Toki concerns a bimorph element provided as a piezoelectric actuator.⁴ The Toki bimorph element includes a flexible plate sandwiched between a first piezoelectric ceramic 16 and a second piezoelectric ceramic 17, which are each provided as thin plates.⁵ Further to Toki, when voltage is impressed between the first piezoelectric ceramic and the flexible plate, the bimorph element bends due to the contraction and expansion of the piezoelectric ceramics.⁶

Assuming, *arguendo*, that the Toki piezoelectric ceramics (16 and 17) are first and second actuator units, Applicants submit that Toki fails to disclose or suggest that piezoelectric ceramics 16 and 17 ***each have a multi-layered piezoelectric element layer***, as recited in independent Claim 1.

Therefore, Applicants submit that Rosenberg and Toki, taken alone or in combination, fail to disclose or suggest that ***each of the first and second actuator units has a multi-layered piezoelectric element layer***, as recited in Claim 1. Accordingly, it is

³ Id.

⁴ Toki, col. 4, l. 21-23.

⁵ Id. at col. 4, l. 52-56.

⁶ Id. at col. 5, l. 1-5.

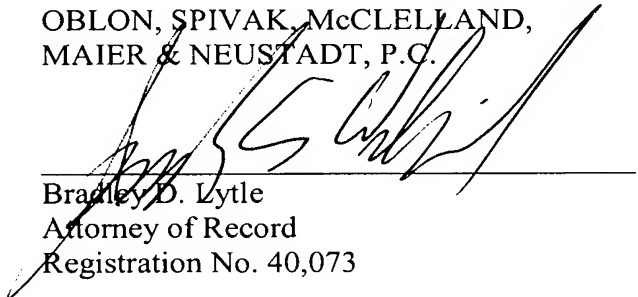
respectfully submitted that independent Claim 1 (and all associated dependent claims) patentably distinguishes over any proper combination of Rosenberg and Toki.

Applicants further submit, for the same reasons as discussed above with regard to Claim 1 and for the more detailed features presented by Claim 14, the applied references fail to disclose or suggest the features recited in Claim 14. It is therefore submitted that independent Claim 14 (and all associated dependent claims) patentably distinguishes over any proper combination of Rosenberg and Toki.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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